#### LESSON TITLE: VISUAL SEARCH

#### A. TRAINING OBJECTIVE

**TASK:** Know the principles of visual search.

**CONDITIONS:** Given instruction in a classroom.

**STANDARD:** Correctly answer verbal questions when called upon.

# B. INTERMEDIATE TRAINING. None.

#### C. ADMINISTRATIVE INSTRUCTIONS

1. Training time: Recommended instructional time is 0.5 hours.

2. Training location: Scheduled classroom.

3. Training type: Conference.

4. Students: Scheduled personnel.

- 5. Principal and assistant instructors required: One primary instructor for each class of 20 students.
  - 6. Training aids and equipment: Overhead projector, transparencies, and screen.

7. References: FM 21-305.

# D. SEQUENCE OF ACTIVITY

#### 1. INTRODUCTION.

- a. **Interest Device**. Most of what you do when you drive is a reaction to what you see. To be a good driver you need to see well. Seeing well means knowing where to look; ahead, to the side, and behind.
- b. **Tie-in**. Alert drivers see everything that goes on in front of their vehicles, and by checking their mirrors, a great deal of what goes on to the sides and rear. But they act only on those things that will affect their safety.

## c. Lesson Objective.

**ACTION:** After this lesson the student will know the principles of good visual search habits.

**CONDITIONS:** Given instruction in a classroom.

**STANDARD:** Correctly answer verbal questions when called upon.

# d. Procedures.

- (1) Explanation.
- (2) Summary.

#### 2. EXPLANATION.

- a. **Looking Ahead**. To avoid last minute moves, a driver needs to look far enough ahead to see things early. One of the most common mistakes drivers make is looking right in front of their vehicle instead of down the road.
  - (1) Expert drivers try to focus their eyes at least 12 seconds ahead. In city driving, 10 to 15 seconds is about one block, while on the open highway it is about one-quarter of a mile (a much greater distance).
  - (2) Looking at least 12 seconds ahead will help you control your vehicle in another way. When you focus your attention at least 12 seconds ahead, it will be easier to keep your vehicle in a steady path. Your vehicle will not weave in its lane.
  - (3) Taking in the whole scene. Looking at least 12 seconds ahead does not mean looking at the middle of the road. It means taking in the entire scene, including the side of the road.
    - (a) If you look ahead, you will be able to see important things that you cannot see later on, such as someone getting into a parked car.
    - (b) Scanning the roadside helps you see:
    - Vehicles and people that may be in the road by the time you get there.
    - Signs warning of conditions ahead.

• Signs giving you information about places ahead and how to reach them.

- b. **Looking to the Sides**. Any time you come to a place where others may cross or enter your path, you should look to the sides to make sure no one is coming. These places include:
- Intersections.
- Crosswalks.
- Roadside areas.
- Railroad crossings.
  - (1) *Intersections*. An intersection is any place where one line of traffic meets another. It includes:
  - Cross streets and side streets.
  - Freeway entrances.
  - Driveways, alleys, and shopping center entrances.
    - (a) Always look both ways when approaching an intersection.
    - Look to the left. Cars coming from the left are closer to you.
    - Look to the right. Drivers often fail to see vehicles to the right. As a result drivers are more apt to be hit by a car coming from the right.
    - Look in both directions. Take one more look in both directions before you pull out, just in case there is someone you did not see the first time.
    - Look both ways. Make sure you look both ways, even when you cross a one-way street. Someone might be going the wrong way.
    - (b) Do not rely on traffic signals. At an intersection, look left and right, even if other traffic has a red light or stop sign. Someone may run either one.
    - (c) Make sure you have a good view.
    - If your view of a cross street is blocked by a building, trees, shrubs, or a row of parked vehicles, edge forward slowly until you can see.

• If a line of cars is blocking your view of another lane, wait until the cars move. If you try to look by sticking the nose of your vehicle into the other lane, you may get hit.

# Transparency 4-35

- (2) *Crosswalks*. When turning a corner, watch for people who are about to cross the street you are turning into.
- Remember, if you have a green light, the light is also green for pedestrians.
- A special situation arises where a right turn on red is permitted.
- In all cases, the law requires drivers to yield to pedestrians in the crosswalk.
- (3) *Roadside areas*. Whenever there is a lot of activity along the side of the road, there is a good chance that someone will cross or enter the road. Therefore, it is very important to look to the sides when you are near:
- Shopping centers and parking lots.
- Construction areas.
- Busy sidewalks.
- Playgrounds and school yards.
- (4) *Railroad crossings*. Look both ways as you approach a railroad crossing.
  - (a) Look, even if the warning lights are not flashing (the signal may not be working).
  - (b) When stopped at a railroad crossing with more than one track, wait a moment after the train passes. Wait until you have a clear view well down the track in both directions before you start across. Another train may be coming from the other direction.

**TRANSITION**: To avoid a collision, it is a good idea to check traffic behind you. How often you check behind depends on traffic conditions. By checking behind, you will find out if someone is following too closely or coming up too fast. Checking behind will give you time to do something about it.

# Transparency 4-36

c. **Looking Behind**. It is important to look behind when anything ahead of you indicates that you may have to adjust speed or position.

- This would include a change of lanes, slowing quickly, driving down a long or steep hill, approaching an intersection, or backing up.
- Glance over your left or right shoulder to be sure no one is near the left or right rear corners of your vehicle. These areas are called blind spots, because you cannot see things in these areas by looking at your mirrors. You have to turn your head.
  - (1) *Changing lanes*. Whenever you change lanes, you must check behind you to make sure you are not getting in the way of cars that are already there.
    - (a) Changing lanes include:
    - Changing from one lane to another on a roadway.
    - Entering the roadway from the curb or shoulder.
    - Entering a freeway or highway from an entrance lane. (When two or more drivers are involved in a merging situation, both drivers should adjust speed and lateral position.)
    - (b) Procedures for checking traffic behind:
    - Glance in your rearview and side mirrors. Make sure that no one is preparing to pass you.
    - Glance over your left or right shoulder. Be sure no one is near the left or right rear corners of your vehicle.
    - *Check quickly*. Do not take your eyes off the road ahead for more than an instant. The vehicle ahead of you could stop suddenly while you are checking over your shoulder.
    - Check using left side mirror or glance over your left shoulder. Use your left side mirror to check to your left while you are preparing to change lanes or pull onto the roadway. This way you can keep an eye on vehicles ahead of you at the same time. Check over your left shoulder just before you change lanes. Make sure that your side mirror is giving you the whole picture.
    - *Check far lanes*. Someone in another lane may plan to move into the same spot you do.

# Transparency 4-37

(2) *Slowing down suddenly*. Take a quick glance in your mirrors before you slow down or stop. It is very important to do this when you slow down suddenly. Some situations when this may happen are:

- When you slow down for something in the road ahead that the driver behind you cannot see. (For example, you come around a corner and see a car stalled in the road.)
- When you are prepared to turn into a side road or driveway. (This is very important if the driveway is just before an intersection.)
- When you are stopped to pull into a parking space.
- (3) *Going down a long or steep hill*. Check your mirrors on a long or steep hill. Drivers of trucks and buses often try to build up speed so that they can make it to the top of the next hill more easily. If you see them early you can change lanes or increase speed to move out of their way.
- (4) *Backing up*. Backing is dangerous because it is hard to see behind your vehicle. Here are some rules you should follow whenever you have to back your vehicle:
- Check behind your vehicle (or car). (In accordance with AR 385-55, drivers of military vehicles with passenger-carrying capacity greater than 12 and of 2 1/2-ton and larger trucks will use ground guides when backing.)
- If you are backing in a straight line, place your right arm on the back of the seat and turn around so that you can look through the rear window. Keep your head turned to the right looking backwards until you are stopped.
- If you are turning while backing, be sure to check the front fender on the side opposite your turn to make sure you have clearance. Do not depend on your mirrors. Do not use the side window. You cannot see the right side of the vehicle when you look out the left side window.
- Back slowly, your vehicle is much harder to control and to stop while you are backing.
- Because it is harder to see while backing, try to do as little backing as possible. In a shopping center, try to find a parking space you can drive through so that you come out head first.
- Whenever possible, avoid backing into traffic. When you enter a driveway or parking space, back into it so you will be going forward when you pull out.

## Transparency 4-38

d. **Clear Windows and Mirrors**. It is important that you be able to see clearly through the windows, windshield, and mirrors. Here are some things you can do to be sure you will be able to see clearly.

- Keep the windshield clean. Bright sun or headlights shining on a dirty windshield make it hard to see. Carry a rag or paper towels so that you can stop and clean your windshield any time it needs it.
- Keep your windshield washer bottle full. Be sure you keep the windshield washer bottle full of windshield washer fluid. Do not use water on very cold days. Water will freeze on the windshield.
- Keep inside windows and mirrors clean. Smoking while driving causes a film to build up on the glass inside your vehicle. Clean the inside of your windows and mirrors frequently if you smoke. (In accordance with AR 385-55, drivers are prohibited from smoking in military vehicles.)

## e. Adjust Seat and Mirrors.

- Adjust the seat so that you can see the road close ahead of your vehicle. Sliding the seat forward will raise it. If it is still too low, use a seat cushion. Do not move the seat so far forward that you cannot steer properly. If you are short, you may need pedal extensions.
- Adjust your rearview mirror and side mirror before you start driving. You will not have time to adjust them when you really need them in traffic.
- If adjustable, adjust your head restraint so that the top of the head restraint is slightly above your ears or at the back of your head, not at the base of your neck. This will reduce the risk of whiplash in the event of a collision from the rear.
- To guard against glare from headlights from cars behind you, use a day/night mirror. Make sure it is in the correct position before you start driving.

#### 3. **SUMMARY**.

- a. **Recap Main Points**. Call on students to answer questions presented on Transparency 4-39.
- b. Allow for Questions.
- c. Clarify Questions.
- d. **Give Closing Statement**. Most of what you do as a defensive driver is in response to what you see. Avoid a fixed stare keep your eyes moving and learn to "read" the road. Look ahead, to the sides, and behind you.
- E. SAFETY RESTRICTIONS. None.
- F. ADDITIONAL COMMENTS AND INFORMATION. None.